REMARKS

Initially, Applicants would like to thank the Examiner for his indication of the allowance of claims 3-5, 7-9, 23-24 and 27, as well as the indication of allowability of claims 15-17 and 19-22, if rewritten into independent form to include the features of base and any intervening claims.

Upon entry of the present amendment, claim 1 will have been cancelled without prejudice or disclaimer of the subject matter recited therein. Claim 28 will have been added for consideration by the Examiner. Additionally, claims 12 and 16 will have been amended to correct informalities. In view of the herein-contained amendments and remarks, Applicants respectfully request reconsideration and withdrawal of each of the outstanding objections and rejections, as well as an indication of the allowability of all the claims now pending, in due course.

In the above-mentioned Official Action, claims 1, 10-13, 16 and 18 were rejected under 35 U.S.C. §102(b) over JIDOSHA et al. (JP 63-202218). Claim 14 was rejected under 35 U.S.C. §103(a) over JIDOSHA et al. Claims 3-5, 7-9, 23-24 and 27 were indicated as allowed. Claims 15, 17 and 19-22 were objected-to for being dependent upon a rejected base claim, but were otherwise indicated as allowable if rewritten into independent form to include all of the features of respective base and intervening claims.

Applicants respectfully submit that the addition of claim 28 does not add new matter

to the present application. In this regard, claim 28 substantially corresponds to features of the application disclosed, *inter alia*, in the last paragraph of page 14 and the first paragraph of page 15 of the specification. Furthermore, claim 28 depends from independent claim 4, which has been indicated as allowable by the Examiner. Accordingly, Applicants respectfully request entry of claim 28, as well as an indication of the allowability thereof, in due course. In this regard, Applicants respectfully submit that claim 28 is allowable at least for depending from an allowable claim 4, as well as for additional reasons related to its own recitations.

Applicants respectfully submit that the rejection of claim 1 is moot in view of the cancellation thereof. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 1.

Applicants traverse the rejections of claims 10, 13 and 16 over JP 63-202218. In this regard, JP 63-202218 discloses that electric current flows to the condenser 2 through the current-limiting resistor 4 when the open/close contact 3 is open (Figure 1) or when the contact 32 is separated (Figures 2 and 3). The electric current flows to the condenser 2 until the charging voltage of the condenser 2 exceeds a predetermined level. When the charging voltage exceeds the predetermined level, the condenser 2 is directly connected to the battery through the open/close contact 3 being closed (Figure 1) or when the contact 32 is contacted (Figures 2 and 3). Therefore, the current does not pass through the current-limiting resistor

4 when the open/close contact 3 is closed or when the contact 32 is contacted. In other words, the charging of the condenser 2 is continuous in JP 63-202218, regardless of the type of charging and regardless of which path is taken to charge the condenser. Moreover, the open/close contact 3 is incapable of entirely stopping the flow of current to the condenser 2, because the alternative path that includes the resistor 4 cannot be switched off. In particular, in normal operation, current would always be expected to flow through the resistor 4 or through the open/close contact 3 or the contact 32 in JP 63-202218.

In contrast, claim 10 recites "[a] power supply circuit... comprising:

a first switch provided in a primary path... a second switch provided in an alternative path... a voltage detector which detects a terminal voltage across said capacitor; and

a charge control device which controls a switching operation of said first switch to intermittently charge said capacitor with said battery via said primary path in the case where said terminal voltage Vc across said capacitor is smaller than a predetermined threshold value..." (emphasis added). In this regard, and only for the purposes of illustration, an exemplary embodiment of the invention is shown in Figure 9 of the present application.

The outstanding Official Action asserts that JP 63-202218 discloses the recited charge control device at element 64, the recited first switch at element 3, and the recited second switch at element 63. However, JP 63-202218 does not disclose that element 64 "controls a switching operation of said first switch to intermittently charge said capacitor" as is recited

in claim 10. Rather, as noted above, JP 63-202218 only discloses continuous charging, regardless of the path taken to charge the condenser 2. Additionally, the teachings of JP 63-202218, as provided with the outstanding Official Action, do not disclose element 63 as a "second switch" that would be subject to a switching operation controlled by a charge control device to change the primary path to the alternative path, as recited in claim 10. Accordingly, Applicants respectfully submit that JP 63-202218 does not disclose or suggest the invention recited in claim 10.

Additionally, claim 13 recites "[a] power supply circuit which is connected to a battery having an overcurrent protective device, said power supply circuit comprising:

a capacitor

an adjusting condenser connected in parallel with said battery, said adjusting condenser having a capacitance so that when said capacitor is charged with said battery, said overcurrent protective device is not actuated to interrupt an output current of said battery to said power supply circuit;

a switching element with which said adjusting condenser can be connected to and disconnected from said capacitor; and

a charge control device which controls a switching operation of said switching element to intermittently charge said capacitor with power output from said battery and said adjusting condenser". In this regard, and only for the purposes of illustration, an embodiment

of the invention recited in claim 13 is shown in Figure 12.

The outstanding Official Action asserts that JP 63-202218 discloses the claimed adjusting condenser at elements 2 and 3. The outstanding Official Action further asserts that JP 63-202218 discloses a capacitor at element 2. The outstanding Official Action also asserts that JP 63-202218 discloses a "switching element" as claimed, but does not assert with particularity which element of JP 63-202218 is believed to disclose the claimed switching element. In other words, the outstanding Official Action asserts that element 2 in JP 63-202218 discloses both a capacitor and an adjusting condenser, and further asserts that JP 63-202218 discloses a switching element "with which said adjusting condenser can be connected to and disconnected from said capacitor". Thus, according to the outstanding Official Action, an unspecified switching element is provided so that element 2 can be connected to and disconnected from itself. Applicants respectfully submit that element 2 of JP 63-202218 is disclosed as a "condenser", and element 3 of JP 63-202218 is disclosed as an "open/close contact". However, Applicants respectfully submit that JP 63-202218 does not disclose or suggest an adjusting condenser or the switching element, as recited in claim 13.

Furthermore, the outstanding Official Action does not specify which element of JP 63-202218 is believed to disclose the claimed charge control device. In this regard, no element of JP 63-202218 is disclosed as "a charge control device which controls a switching operation of said switching element to intermittently charge said capacitor with power output

from said battery and said adjusting condenser". Accordingly, Applicants respectfully submit that JP 63-202218 does not disclose or suggest the invention recited in claim 13.

Additionally, claim 16 recites "[a] power supply circuit which is connected to a battery having an overcurrent protective device, said power supply circuit comprising:

a first capacitor which can be connected in parallel to said battery;

a second capacitor which can be connected in parallel to said first capacitor; and

a charge control device which controls a charging operation for charging said first capacitor and a charging operation for charging said second capacitor;

wherein said charge control device repeats a main charging operation and a relay charging operation alternately;

wherein said first capacitor is connected to said battery with said first capacitor being disconnected from said second capacitor, in order to charge said first capacitor with said battery in said main charging operation; and

wherein said first capacitor is connected to said second capacitor with said first capacitor being disconnected from said battery, in order to charge said second capacitor with power output from said first capacitor in said relay charging operation". In this regard, and only for the purpose of providing an exemplary illustration, an embodiment of the invention recited in claim 16 is shown in Figure 14 of the present application.

In this regard, the outstanding Official Action asserts, at page 4, that JP 63-202218

discloses "a first capacitor (2) which can be connected in parallel to said battery (1)... a second capacitor (1) which can be connected in parallel to said first capacitor (2)". In other words, the outstanding Official Action asserts that element 1 of JP 63-202218 discloses both a "battery" and a "second capacitor". In this regard, Applicants respectfully assert that element 1 of JP 63-202218 is disclosed (and shown in Figure 1) only as a battery, and not a capacitor (or a second capacitor). Furthermore, JP 63-202218 does not disclose or suggest therein both a first and a second capacitor, let alone both the first and the second capacitor as recited in claim 16, i.e., capacitors which can be connected to each other in parallel. Accordingly, Applicants respectfully submit that JP 63-202218 does not disclose or suggest the invention recited in claim 16.

Accordingly, Applicants respectfully submit that each of claims 10, 13 and 16 is allowable, at least for the reasons set forth above. Applicants additionally submit that each of claims 11, 12, 14, 15 and 17-22 are allowable, at least for depending from an allowable independent claim, as well as for additional reasons related to their own recitations. Accordingly, Applicants respectfully request entry of claim 28, reconsideration and withdrawal of each of the outstanding objections and rejections, and an indication of the allowability of each of the claims now pending.

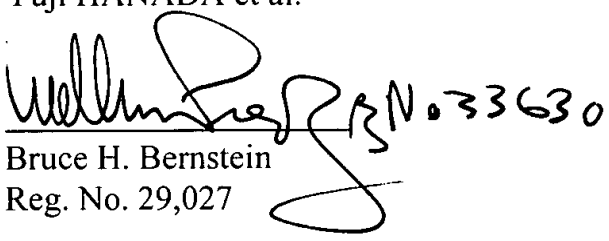
SUMMARY AND CONCLUSION

Applicants have made a sincere effort to place the present application in condition for allowance and believe that they have now done so. Upon entry of the present amendment, claim 1 will have been cancelled and claim 28 will have been added. Applicants have further discussed the reference applied by the Examiner, and shown how the reference fails to teach or suggest the features of the claimed invention. Accordingly, Applicants have provided a sufficient basis to establish the allowability of each of the claims now pending.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the telephone number provided below.

Respectfully submitted,
Yuji HANADA et al.



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